Using Innovation to Solve the Elliott State Forest Conundrum: Leveraging the Forest's Carbon Storage Capacity for Climate Stability and Oregon's Common School Fund



Threatened primary rainforest on the Elliott State Forest (photo by Josh Laughlin)



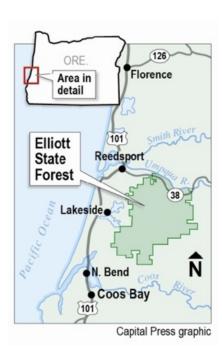
Recently clearcut primary rainforest on the Elliott State Forest (photo by Josh Laughlin)



"While something novel is often described as an innovation, in economics, management science and other fields of practice and analysis it is generally considered a process that **brings together various novel ideas** in a way that they have an impact on society." *From <u>Innovation</u> in Wikipedia*

The Forest

The Elliott State Forest (ESF), located just inland from the Pacific Ocean between Reedsport and Coos Bay, Oregon, is home to stately mature and old-growth forests. It includes 93,000 acres of coastal Douglas-fir forest, 84,000 acres of which is owned by Oregon's State Land Board, and is an asset of Oregon's Common School Fund. Approximately half of the ESF has never been logged and provides dense temperate rainforest habitat and intact waterways. The rivers and creeks of the Elliott harbor strong runs of wild salmon and steelhead, and the older forests provide nesting habitat for the imperiled northern spotted owl and marbled murrelet. Much of the western half of the ESF is primary rainforest, contains no dammed rivers, and stands in stark juxtaposition to the cut-over private industrial forests that surround this public forest. The Oregon Department of Fish and Wildlife reports that one watershed on the west side of the Elliott has the highest coho salmon production on the Oregon Coast. The Oregon Department of Forestry regularly refers to the forest as "murrelet rich." The northern spotted owl, marbled murrelet and Oregon Coast coho salmon are all protected under the federal Endangered Species Act (ESA) and are found throughout the forest.



The Threat

Management of the Elliott State Forest is at a crossroads. As an asset of the Oregon Common School Fund (CSF), these trust lands are overseen by Oregon's State Land Board (SLB; the Governor, Treasurer, and Secretary of State), which has a fiduciary obligation to manage the lands to maximize revenue to Oregon's Common School Fund. Twice yearly, all earned interest is distributed to Oregon public schools. Conflicting with this maximum-revenue mandate is the legal requirement to satisfy the federal Endangered Species Act.

Previously, a Habitat Conservation Plan (HCP) — which allows the legal "take" (killing) of ESA-protected species in exchange for long-term habitat improvements that will contribute to the eventual conservation of the species — guided management on the ESF. Between 2007-2009, the SLB considered modernizing the HCP, however, the board ultimately felt the restrictions of a new HCP would be too great. They elected instead to abandon their HCP and proceed with a forest management plan that would increase logging levels by nearly 40%. They attempted to comply with the ESA by merely avoiding illegal "take" by first surveying and then modifying proposed timber sales if species were found.

A federal court injunction — resulting from a recent ESA lawsuit brought by Cascadia Wildlands, Center for Biological Diversity and Audubon Society of Portland — has significantly slowed logging on the ESF to the point where the SLB is now proposing to sell off parcels of the ESF — and possibly eventually all of its holdings on the ESF — to convert an underperforming asset to one that generates more income and less controversy. If purchased exclusively for intensive timber production, management would have deleterious effects on imperiled fish and wildlife and water quality and would greatly exacerbate climate change through increased carbon emissions.

The Challenge and Opportunity

The State Land Board remains open to raising revenue that comes from alternatives to older forest logging on the ESF, as long as it meets its fiduciary mandate of raising revenue for the CSF. Its primary concern remains school funding stability. A way forward must be created for the SLB that does not include liquidating primary rainforests on the ESF. Possibilities include, but are not limited to:

- > Monetizing the significant ability of these temperate rainforests to store and sequester carbon;
- Acquiring some or all of the Elliott State Forest through a conservation acquisition;
- > Restoratively thinning commercially viable tree plantations

Currently, the SLB is considering to dispose of 2,714 acres of the ESF, including forests and waterways rich with ESA-protected species. The SLB is now having the parcels appraised and plans to decide on whether or not to sell them at its December 10, 2013 meeting.¹

Some Financials to Consider

For the past five years, the average net operating income (NOI) to the Common School Fund from logging proceeds on the Elliott Elliot State Forest was ~\$5.3 million/year.² It is likely the annual NOI from the Elliott will be significantly less in the future due to the ESA court case.

In 2005, the market value of the Common School Fund lands on the Elliott (~84,000 acres) was estimated to be \$489 million. At 2005 logging levels and log prices, the return on asset value of the lands to the Common School Fund was 2.9%. The evaluation anticipated increased logging due to a new forest plan and Habitat Conservation Plan,



The salmon-rich West Fork Millicoma River flows through the heart of the Elliott State Forest (photo by Francis Eatherington).

which would have increased the return on asset value between 3.3 and 4.0%. Such increased logging did not occur.

The market value of the Elliott State Forest in 2013 is not the market value in 2005, especially given the court-imposed ESA constraints on logging. Timberland prices and log prices have changed as well. Like all assets, assets in the CSF can increase or decrease.

The five-year average annual rate of return of the entire Common School Fund is 5.11% on total assets of \$1.2 billion (June 30, 2013).⁴

¹ More information about the parcels and timeline can be found at: http://www.oregon.gov/dsl/LW/Pages/Proposed land sales in coos and douglas counties.aspx

² Oregon Department of Forestry. 2013. Common School Forest Land Annual Report: Fiscal Year 2012. (We estimated that 87% of all NOI from all CSF lands came from the ESF.)

³ Ehlen, Carl F. and Roger G. Lord. 2005. A Cost-Benefit Analysis of the Elliott State Forest Common School Fund Lands. Mason Bruce & Girard., Inc. Portland, Oregon. http://www.cascwild.org/wp-content/uploads/2013/08/MBGElliottStateForest.pdf
⁴ Oregon Treasurer. 2013. State of Oregon Summary of Performance Net of Fees: Rates of Return (Periods Ending June 30, 2013). https://www.oregon.gov/treasury/Reports/Documents/Total%20Portfolio%20Balance%20June%2030,%202013.pdf

To replace \$5.3 million of annual revenue to the CSF from logging the ESF — at the 5-year average annual return for the entire CSF — it would require \$107.44 million be added one time to the CSF to generate returns of \$5.3 million per year.

In other words, the net present value (NPV) of the Elliott State Forest's Common School Fund lands is \$107 million — if recent logging levels and log prices continue. The 2005 evaluation estimated the NPV of then-current Common School Fund income to be \$282 million and if the revised management plan and Habitat Conservation Plan were put into effect, the NPV would have been between \$318 and \$381 million. However, now that the SLB, as trustees of the CSF, which has the ESF as an asset, must comply with the ESA like everyone else, the asset value of the ESF has declined.

As the State Treasurer, Ted Wheeler is a member both of the SLB that oversees the CSF and the Oregon Investment Council that guides the investments of the CSF. Wheeler noted recently:

Because of strong recent investment performance, the [Common School] Fund has recovered from the 2008-09 worldwide economic crash, which caused the value to plummet to about \$700 million. The fund is now valued at \$1.2 billion.

However, the long-term projected returns for the Fund are uncertain to fare as well, in large part because of poor revenues from state school forestlands, such as the Elliott State Forest, which covers 85,000 acres near Reedsport.

While the Constitution calls for the Land Board to maximize returns from common school holdings to benefit public education, the net revenue from the Elliott State Forest has not achieved the levels anticipated under the 2012 Elliott Forest Management Plan. In other words, while invested funds have generated relatively strong gains, the Fund's forestland holdings have produced significantly less well.

The Land Board is discussing potential steps, such as the potential of selling expensive-to-manage parcels and then investing the proceeds. [emphasis added]⁶

Even without ESA obligations, the ESF has long been an underperforming asset in the CSF and will likely continue to perform below average.

A Plea for Help: The Elliott As a Carbon and Fish and Wildlife Sanctuary

A number of factors suggest that the Elliott State Forest's carbon storage capacity and reputation as a sanctuary for fish and wildlife could play a significant role in supporting the Common School Fund as an alternative to clearcutting its primary rainforests. They include:

- In 2006, the California Assembly had the foresight enact AB-32 **Global Warming Solutions Act of 2006.** Subsequent measures created mechanisms for sequestration-based carbon trading using the Climate Action Reserve protocol.
- ➤ In 2009, a paper (H. Keith, et al. 2009. Re-evaluation of forest biomass carbon stocks and lessons from the world's most carbon-dense forests. Proceedings from the National Academy of Sciences) was published that looked at vegetative and subsurface carbon sequestration in a variety of forests globally and found that moist, temperate forest particularly those in the Pacific Northwest were the best at capturing and storing carbon.

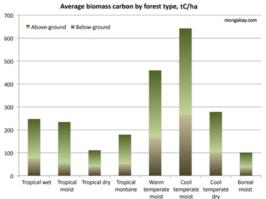
_

⁵ Ehlen and Lord 2005.

Wheeler, Ted. September 17, 2013. News Release: State Land Board Allots an Extra \$12 Million to Oregon School Districts, With a Caveat. http://www.oregon.gov/treasury/Newsroom/Pages/ViewArticle.aspx?pressReleaseID=68

- An environment has been created such that the State Land Board is open to funding the Common School Fund with mechanisms other than clearcutting primary rainforest.
- The Elliott State Forest is an iconic forest capable of attracting large-scale public attention due to its beauty and myriad of fish and wildlife species.

Our core hope is that this kernel of an idea will lead to a multi-party collaborative effort that should include conservation groups, academic institutions, business leaders and visionary governmental officials willing to commit time and resources towards developing the Elliott State Forest as an integrated carbon sequestration laboratory.



Graph adapted from H. Keith, et al. 2009.

Primary outcomes would include: 1) mitigating climate change by leveraging the Elliott to "offset" carbon pollution in California, 2) creating an environment of economic certainty for the State Land Board, 3) maintaining the outstanding fish and wildlife habitat in this part of the Oregon Coast Range, and 4) providing a cutting-edge example for others with similar natural resource conundrums.

Constructing, negotiating and implementing an innovative approach to the challenge on the Elliott State Forest is beyond the current means and capacity of Cascadia Wildlands. While we would certainly like to help see the full potential of this opportunity realized, we recognize that it has to be the work of many individuals, organizations and institutions. We hope this concept paper serves as a catalyst for thought and an invitation for leadership, participation and investment. Please help us save the Elliott State Forest.

About Cascadia Wildlands

Founded in 1998, Cascadia Wildlands is a 501c(3) non-profit, grassroots conservation organization known for its innovative and effective campaigns. Our mission is to educate, agitate, litigate, and inspire a movement to protect and restore Cascadia's wild ecosystems. We envision vast old-growth forests, rivers full of wild salmon, wolves howling in the backcountry, and vibrant communities sustained by the unique landscapes of the Cascadia bioregion. We work in the Cascadia bioregion (within the US) where threats to wild places and wildlife are highest. The Cascadia bioregion is the temperate forest zone extending along the Pacific Coast and associated watersheds from northern California to south-central Alaska.

^{*} This paper was made possible with edits and additions from Andy Kerr, The Larch Company, and Bob Ferris, Cascadia Wildlands.